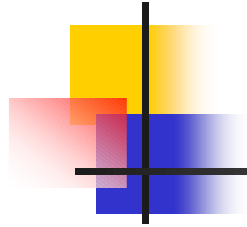




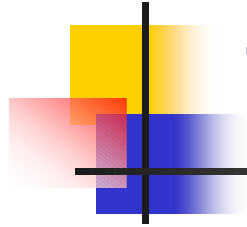
NC Energy Code Update



Introduction

- Activities ongoing in North Carolina

Presenter: Billy Hinton – Code Official for the
State of North Carolina



Topics for Discussion

- North Carolina Energy Code Update
- Implementation Challenges
- Participation in the ASHRAE and ICC processes



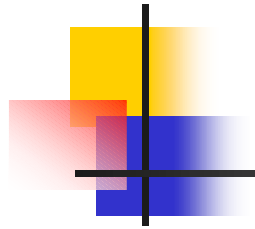
North Carolina Energy Code Update

- Adoption of the 2000 ICC Codes
- Includes adoption of the 2000 IECC
- Includes adoption of the 2000 IRC, chapter 11



North Carolina Energy Code Update

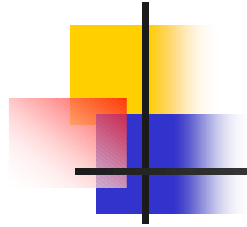
- Substantive NC amendments to the IECC
 - Adoption of ASHRAE 90.1-1999
 - No trade-off allowed for reduction of envelope requirements when using high efficiency HVAC equipment for one and two family dwellings and townhouses unless IECC Chapter 4 analysis is performed
 - Deletion of SHGC requirements for one and two family dwellings and townhouses



Implementation Challenges

- Training is needed for the new codes for
 - Design professionals
 - Contractors
 - Code officials

- The NC Energy Division and the US DOE are important partners
 - Workshops are possible through US DOE grant funding
 - Technical assistance has been provided from Pacific Northwest National Laboratory and BCAP



Implementation Challenges

- Thanks to the US DOE & PNNL for the COMcheck and MECcheck compliance tools
 - Ease of use
 - Future wishlist for enhancements
 - Wizards
 - Extension to ASHRAE 90.1-1999



Participation in the ASHRAE and ICC Processes

- Two distinctly different processes



Participation in the ICC Code Change Process

- ICC Mid Year Hearing and the Annual Meeting Hearing
 - Timely disposition of code change proposals
 - Process schedule limits debate and exploration of the issues
 - Not a consensus process



Participation in the ASHRAE Process

- ASHRAE Winter & Annual Meetings and the Continuous Maintenance Process
 - Procedurally a time consuming process
 - Time is allowed for a complete analysis, discussion, and debate of the issues
 - The ASHRAE process is a consensus process



Observations of the Two Processes Compared

- The ICC process is faster, but it limits debate of the issues and does not achieve consensus.
- The ASHRAE process is slower, but it is more thorough. Issues are explored in more detail and proposals must be shown to have both technical and economic merit.
- The ASHRAE process does achieve consensus.



Opportunities for ASHRAE

- ASHRAE is a technical leader and has an opportunity and the expertise to make significant contributions in the codes arena.



Opportunities for ASHRAE (Continued)

- ASHRAE has been and continues to be a leader in the development of technical standards for use by engineers. The new challenge is to produce standards intended for codes that identify minimum code requirements that can be easily understood and applied by the user, implemented by the contractor, and enforced by the code official.



Benefit of Working on the ICC and ASHRAE Committees

- Working on these committees has provided valuable insight into the basis and justification of requirements contained in codes and standards. This has been beneficial to our efforts in developing a new energy code for the state of North Carolina.
- It has also been beneficial to provide input to the ASHRAE Project Committees on the needs of less technical users and code enforcement personnel.



Benefit of Working on the ICC and ASHRAE Committees

- The ASHRAE 90.1 and 90.2 Project Committees are considering improvements to make these standards easier to use and enforce as well as identifying additional opportunities for energy savings that are technically and economically justified.



Benefit of Working on the ICC and ASHRAE Committees

- Codes identify minimum requirements necessary for life safety and the general welfare of the public. The ASHRAE code intended energy standards 90.1 and 90.2 identify minimum requirements that have been technically and economically justified to provide for the general welfare of the public.



2001 National Workshop on State Building Energy Codes

- Thanks for the opportunity to share this information with you today.